

ABSTRACT OF THE DISCLOSURE

In a method for reversibly transforming a data format, a forward transformation and a backward transformation are reciprocally conducted for data between unit systems having different resolution levels, and the forward transformation and the backward transformation, a first unit system having a lower resolution level is used as a common unit system, and a reversible data conversion is conducted by an integer operation for data in the first unit system having the lower resolution level and data in a second unit system having a higher resolution level higher than the first unit system.